

A CLASS III ARCHEOLOGICAL SURVEY OF THE SOUTH DELTA WATER
MANAGEMENT PROGRAM AREA, SAN JOAQUIN AND CONTRA COSTA COUNTIES,
CALIFORNIA

August 1994

United States Bureau of Reclamation
Sacramento, California 95825

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Table of Contents

Abstract	3
Introduction	4
South Delta Alternatives	5
Regulatory Context	7
Area of Potential Effect	10
Methods	10
Ethnographic, Archeologic and Historic Context	11
Ethnographic Context	11
Archeological Context	14
Historical Context	16
Geographic Reconstruction	23
Results	25
Cultural Resources	25
Traditional Cultural Properties	28
Conclusions and Recommendations	28
Appendix 1	30
Notes on Previously Recorded Sites, by Quadrangle	30
Appendix 2	33
Paleontologic Resources	33
Bibliography	35

A Class III Archeological Survey of the South Delta Water Management Program
Area, San Joaquin and Contra Costa Counties, California

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Abstract

A Class III archeological survey of the South Delta Water Management Program area was conducted by U.S. Bureau of Reclamation archeologists. The survey consisted of a records search of previous surveys in the area, reference to standard historic resource publications, historic maps, and field examination of terrestrial areas subject to disturbance.

The Indians who lived in the study area at the time of initial contact are known as the North Valley Yokuts. After the first contact by Spanish expeditions in the first decade of the 19th century many of the Indians were drawn into missions. Missionization, coupled with the effects of European diseases and the onslaught of settlers after the 1849 gold rush, effectively destroyed the aboriginal way of life before much ethnographic information could be obtained.

Historic settlement of the area began with the reclamation of Delta lands in the 1850's. Peat lands of the Delta richly rewarded attempts at agriculture and by the beginning of this century most of the islands and tracts in the area had been reclaimed for farming. Intensive agriculture has

resulted in a continuing process of peat subsidence, lowering many of the islands to below sea level.

Fifteen archeological sites and one historic location have been previously identified within the South Delta Study Area (West and Scott 1990).

Total area surveyed was approximately 150 acres. No historic properties were identified in the area of potential effect for the proposed project.

Introduction

In October, 1986 the U.S. Bureau of Reclamation (USBR) entered into an agreement with the California Department of Water Resources (DWR) and the South Delta Water Agency to address the problems of inadequate water levels, circulation patterns, and water quality in the South Delta (Map 1). Under provisions of this agreement, alternative actions have been proposed to remedy these problems and an environmental impact statement/environmental impact report (EIS/EIR) will be prepared jointly by the USBR and DWR.

Federal and State laws mandate the consideration of cultural resources in the planning process. The National Historic Preservation Act of 1966 (NHPA) directs Federal agencies to assume responsibility for consideration of historic resources, and Section 106 of NHPA requires the Federal agency to consult with the State Historic Preservation Officer and the Advisory Council on Historic Preservation (36 CFR part 800). The California Environmental Quality Act (CEQA) of 1970 and the Guidelines for Implementation of CEQA also provide for the consideration of cultural resources.

The purpose of this report is to present the results of a Class III archeological survey of the areas that would be affected by each of the proposed actions. The locations of archeological sites given in this report are based upon a records search of previous surveys (including the Information Centers). The Delta Peripheral Canal (Ferris, Schulz, and Speer 1982), Dredged Material Disposal Sites (West and Schulz 1975), San Luis Drain (USBR 1983), Class I-and Class II Archeological Survey of the South Delta Water Management Program Area (Scott and West 1990; West and Scott 1990) studies included field surveys as well as summaries of past investigations. Field examination of the Area of Potential Effect (APE) were conducted by G.J. West and P. Welch. Also examined were the National Register of Historic Places (including recent updates), California Historic Landmarks, and California Inventory of Historic Resources.

South Delta Alternatives

The south Delta study area (SDSA) generally comprises the lands and channels of the Sacramento-San Joaquin Delta southwest of Stockton (Map 1). The area within the SDSA boundaries includes about 150,000 acres, of which about 120,000 acres are used for irrigated agriculture. The remaining area

consists of waterways, berms, channel islands, levees, and lands devoted to residential and industrial use.

Major channels and waterways in the SDSA include: San Joaquin River, Old River, Middle River, Woodward and North Victoria canals, Victoria and North canals, Grant Line Canal, Italian Slough, Indian Slough, Tom Paine Slough, and the adjoining SWP and CVP water export facilities. Water is diverted from the 75 miles of south Delta channels by the combined State, Federal, and local diversions.

The various alternatives considered in this report were:

1. No action.
2. Direct water level and circulation improvements involving the following:
 - a. Construct a new intake structure at Clifton Court Forebay.
 - b. Dredge a 4.9 mile reach of the Old River channel.
 - c. Construct a tide barrier along Middle River near the confluence of Middle River with Victoria Canal, North Canal, and Trapper Slough.
 - d. Construct a tide gate structure on the Grant line Canal.
 - e. Construct a barrier on Old River east of the Delta Mendota Canal
 - f. Construct a fish control structure on Old River near the confluence with the San Joaquin River.

The proposed actions include excavation, borrowing, disposal, construction, and dredging all of which could effect cultural resources.

Regulatory Context

The most important Federal laws applicable to archeological and historic resources are the National Historic Preservation Act of 1966, as amended, and the National Environmental Policy Act of 1989 and regulations associated with them, particularly 36 CFR 800. These statutes and regulations, as well as others that also apply to cultural resources (e.g., P.L. 93-291), cover all projects that include Federal land, are supported in whole or part by Federal funds, or require a Federal permit (e.g., 404 Permit), include a consultation process with the State Historic Preservation Officer and the Advisory Council on Historic Preservation (ACHP) to ensure that potentially significant historic resources have been adequately considered in the planning for the undertaking.

The National Register of Historic Places (NRHP) has been established by statute to list historic properties deemed to have historical significance (36 CFR 60). Any Federal action that could affect a cultural resource listed on or eligible for listing on the NRHP is subject to review and comment under Section 106 of the National Historic Preservation Act. Affects to these historic properties must be considered in accordance with the regulations of the Advisory Council of Historic Preservation (36 CFR 800). Insignificant cultural remains usually do not require management consideration unless they possess the qualities specified by the California Environmental Quality Act (CEQA) or other laws.

Significance of cultural resources is measured by NRHP criteria for evaluation:

"The quality of significance of American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

"(a) That are associated with events that have made a significant contribution to the broad patterns of our history; or

"(b) That are associated with the lives of persons significant in our past; or

"(c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

"(d) That have yielded, or may be likely to yield, information important in prehistory and history" (36 CFR 60.4).

The most important state regulations providing for the protection of historic properties, including prehistoric and historic archeological resources, is contained within CEQA Appendix K (14 California Administrative Code, Section 15000 et seq.), which outlines procedures appropriate for the protection and preservation of such resources. The Health and Safety Code Section 7052) prohibits the disturbance of human remains except under certain conditions and also specifies procedures (Ch 1492), including consultation with the California Native American Heritage Commission, to be followed in the event that Native American graves are found. Other section of the Public Resources Code (Sec. 5025, 5024.5, 5097.5, 6313), prohibit unauthorized disturbance or removal of archeological or historical resources are to be altered. The State Penal Code (Section 622.5) applies to objects of historical or archeological interest located on public or private land and,

specifically exempting the land owner, provides penalties for damaging such objects.

CEQA Statutes and Guidelines define an "important archeological resource" as one which:

"A. Is associated with an event or person of

1. Recognized significance in California or American history, or
2. Recognized scientific importance in prehistory.

"B. Can Provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable or archeological research questions;

"C. Has special or particular quality such as oldest, best example, largest, or last surviving example of its kind;

"D. Is at least 100 years old and possesses substantial stratigraphic integrity; or

"E. Involves important research questions that historical research has shown can be answered only with archeological methods" (California Office of Planning and Research 1986:295-296)

If, after identification and evaluation, an archeological site is determined to be legally important under Federal stature, then a mitigation plan must be prepared in consultation with the SHPO and ACHP. If an archeological site is deemed not legally important, both the resource and the effect on it should be noted but need not be considered further in the process. In the SDWP, where both CEQA and NRHP evaluation criteria apply, Federal standards prevail. Historic properties assessed as NRHP-eligible are

also considered significant and procedures for managing these properties under 36 CFR 800 satisfy the CEQA Statutes and EIR Guidelines as well.

Treatment of human remains is covered under both State and Federal law and regulation. The Archeological Resources Protection Act (except for interstate transport) and the Native American Graves Protection and Repatriation Act is specific to Federal lands; State law covers State, non-Federal public and private lands.

Area of Potential Effect

The area of potential effect is presented for each of the actions in Maps 2 to 5. These include the actual construction site, laydown areas, borrow sites (other than commercial quarries), spoil sites, and any new access routes. Most of the construction will occur within the existing water way replacing existing temporary structures.

Methods

The first stage of this class III investigation was to develop ethnographic, archeologic and historic contexts to evaluate the significance of cultural resources based National Register of Historic Places criteria. Second, additional records searches beyond those made in Scott and West (1990) and West and Scott (1990) were made at the California Department of Parks and Recreation Archeology Laboratory and the Museum of Paleontology, University of California, Berkeley. A letter was sent to the State of California Native American Heritage Commission to determine if any sacred sites are recorded for the study area. In addition a check of the primary published resources was made to identify any traditional cultural properties and sacred sites. Third,

on the ground surveys were made for area of potential effect (APE) for each project component. Where applicable and accessible the entire APE was covered by a series of transects some 10-15 meters apart. Decisions for survey of the APE was based on a geographic model which included areas where: (1) ground disturbance or inundation may occur, (2) consist of mineral soils, (3) are above -5 feet below mean sea level, and (4) supratidal alluvial areas adjacent to modern and prehistoric waterways. Areas of recently made-land and rip-rap were not covered on foot.

Ethnographic, Archeologic and Historic Context

Ethnographic Context

The native population in the south Delta area at the time of contact, the North Valley Yokuts, are members of the Penutian language family. There has been some dispute over the exact boundaries and divisions of the Yokuts and Miwoks in this area, and delineation of groups is based largely on very limited and problematical linguistic evidence (Bennyhoff 1977, Schenck 1926, Kroeber 1925, Wallace 1978). The approximate area the Nochochomne-Cholbon Yokut triblets habitat was between the San Joaquin River on the east, the Old River (western channel of the San Joaquin River) on the west, south of the confluence of the three main channels on the north, and to about the point of trifurcation of the channels in the south (Bennyhoff 1977:map 2). The native population was not evenly distributed. Rather, it was clustered in a narrow strip of land boarding the San Joaquin River and its main tributaries (Wallace 1978). Baumhoff (1963:MAP 7) estimated a density of 10+ persons per square mile along the waterways, which is congruent with Schenck's (1926) estimate for the Delta marshlands. Schenck (ibid) estimated that villages averaged

about 200 persons each and were located along the main rivers five to ten miles apart. Based on historical records Cook (1955) estimated that the area contained four or five settlements with a combined population of 1,300 persons. Fr. Ramon Abella in 1811 noted three rancherias (settlements) with a population of 900, or 300 per rancheria (Cook *ibid*).¹ Considering the 200 or so Indians missionized from the area, Cook (*ibid*) concluded that the aboriginal population was 1,500 or greater.

The Northern Valley Yokuts were semi-sedentary with principle settlements on low mounds or levees² composed of sand, silt and clay on or near the banks of major water courses. Loosely centralized triblets headed by a hereditary chief were tied to principle villages. Secondary settlements consisted of small camps or villages of several households. Settlement locations appear to be in response to subsistence resources and protection from winter and spring flooding. Security also may have been a factor but direct evidence is lacking. Settlement groups broke up seasonally to exploit other resources, such as acorns, as they became available within a well defined territory for fishing, gathering and hunting. Settlements contained domed-shaped houses and shelters made of brush and tules. Archeological data indicate that human internments were made at Delta settlements and cemeteries. Besides settlements there were fishing stations, hunting camps, and lithic tool manufacturing sites. Only settlements and fishing stations are reported for the study area. All lithics had to be imported.

¹ Cook concluded that the rancherias would have been north or north west of Pescadero, a triblet center to which repeated reference is made in early documents. Bennyhoff (1977) rejects Cook's conclusions regarding affiliation of the three rancherias and his placement of Pescadero (Cholbon), but appears to accept the population estimate for the settlements.

² Natural river levees were apparently restricted to the major drainages and did not extend to the lower reaches of these drainages.

Fish, fowl, acorns, and tule roots were the primary Northern Valley Yokut subsistence resources. Other resources, such as freshwater bivalves, small mammals, seeds and bulbs, also were important. Elk, deer, and antelope, although reported abundant and easily hunted by the early explorers, probably constituted a marginal subsistence resource (Wallace 1978).

Several Spanish expeditions, beginning with Fages' in 1772, made some contact with Indians in the Sacramento-San Joaquin Delta area. It was not until the first decade of the 19th century, however, that many of the Yokut groups, including the Nochochomne-Cholbon, were encountered by explorers. Specifically these were the expeditions by Moraga-Munoz in 1806, Moraga in 1810 and Sanchez in 1811 (Schenck 1926).

The decline of Yokut culture may be seen as the result of several factors. First, the effect of the missions in northern California. Even before explorers made extensive contact the missions of San Jose, Santa Clara, and others were drawing Indians away from their native villages. Second, the deadly effects of European diseases. This factor was especially devastating in 1833 when thousands were killed by an illness, possibly malaria. A third factor which disrupted Yokut society was the secularization of the missions in 1834. This sent many missionized Indians of various cultural affinities, seeking refuge from Europeans, into areas of previous cultural homogeneity (Wallace 1978). The almost total destruction of the Yokut culture was completed with the influx of Americans after the 1849 gold rush when their land was appropriated for farming.

Because of the early disruption of the Northern Valley Yokuts, little ethnographic information is available other than some demographic data recorded by explorers and missionaries, and some linguistic description

(Bennyhoff 1977, Schenck 1926, Schulz 1981, Kroeber 1925). No traditional properties or sacred sites within the study area are noted in the primary literature.

Archeological Context

The Sacramento-San Joaquin Delta, along with the adjacent areas of the lower Central Valley, comprises one of the most intensely investigated areas in the archeology of California. Due to its position at the geographical center of the state, a rural region conveniently accessible from urban centers, and a zone of high prehistoric population density, the Delta has attracted archeological interest for more than a century (Belding 1882; Davis 1907; Holmes 1902; Kroeber 1909; Schenck and Dawson 1929). Large-scale systematic excavations were initiated in the 1930's by Sacramento Junior College and the University of California. The major results of this work have been to discredit previous assumptions of a general uniformity among all prehistoric cultures, and the development of a tripartite culture system for central California.

The central California culture sequence is based on the stratigraphic position of culturally distinct components, recognized on the basis of recurring funeral patterns and artifact types (Lillard, Heizer and Fenenga 1939). Three periods or horizons are recognized, and these are termed simply the Early period (now dated approximately 2500-500 B.C.), the Middle period (500 B.C. to A.D. 300) and the Late period (A.D. 300 to 1840). This sequence has proven extremely useful, particularly because many of the temporally

diagnostic artifact types are distributed widely and contemporaneously throughout central California and neighboring areas.

Marked cultural differences between localities have occurred at various times however, which are not reflected in the temporal sequence. Consequently, attempts have been made to classify the cultural complexes of central California independently. The most acceptable classification thus far is that of Fredrickson (1974), which defines three major patterns, the Windmill, Berkeley, and Augustine.

The Windmill Pattern is known only from the eastern Delta, Camanche Reservoir area, and adjacent areas of the lower valley, from the middle Cosumnes River to Stockton. It is equivalent to the Early period in this area, and is characterized by extended, westerly oriented burial positions as well as diagnostic shell ornaments and stone tool forms. Considerable debate has focused on the subsistence base of these people; there is a good possibility that acorn processing was unknown or unimportant (Gerow 1974; Heizer 1974; Schulz 1970, 1981).

The Berkeley Pattern is equivalent to the Middle period in the lower Sacramento Valley, but earlier phases may be coeval with the early period in the Bay area. It is characterized by flexed burial positions, diagnostic ornaments, and, in the valley, by the proliferation of bone fish spears or leister points and stone pestles. This appears to correspond with an increasing dietary emphasis on fish and acorns.

The Augustine Pattern corresponds to the late period in the lower Sacramento Valley. It is marked by the appearance of small projectile points indicating the introduction of the bow, as well as changes in funerary patterns and ornament styles. These cultures in general appear to be

ancestral to the ethnographic groups of the same area, and Bennyhoff (1961) has been able to correlate areal distribution of archeological artifact styles in these late groups with historic linguistic boundaries.

A further culture pattern should be noted is the Meganos Complex defined by Bennyhoff (Fredrickson *ibid*). This complex is found in the Middle and Late periods in the lower San Joaquin Valley and the western Delta, and is characterized by high frequencies of extended burials without predominate orientation and by distinct cemeteries unassociated with midden areas. Such cemeteries of Middle period age are known particularly from the sand mounds of Jersey Island, Bradford Island, Bethel Tract, Hotchkiss Tract and Holland Tract (Cook and Elsasser 1956). It is apparent that these mounds have consolidated since the internments were made, since they can now be excavated only with great difficulty. Sites of this complex share the fishing/acorn dietary emphasis of the Berkeley Pattern.

The earliest known excavations in the study area were made by James A. Barr, a superintendent of schools for Stockton, sometime between 1898-1901. Barr worked on Union Island northeast of Bethany, possibly at SJo-137. SJo-137 may have been the mound where the Spanish expeditions of 1810 and 1811 reported the village of Pescadero ("man who sells fish"), so named because they saw Indians with fish there (Hoover, Rensch and Rensch 1948, Schenck 1926). The name Pescadero suggests that some exchange between the Spanish and Indians had occurred. Bennyhoff (1977) identifies Pescadero (Cholbon) as a triblet center. The collections from Barr's excavations are in the University of California Museum of Anthropology (Ragir 1972).

The only other archeological investigation nearby the study area was on the adjacent Palm Tract. Heizer (Lillard, Heizer and Fenenga 1939) reported

on the excavations at CCo-141. Based on the artifacts associated with 25 burials and the mode of internment the site was assigned to the middle (transitional) and late periods.

Historical Context

Prior to 1850, before significant human modification, the Delta consisted mainly of intertidal wetlands laced with about 100 square kilometers of subtidal waterways (Atwater and Belknap 1980). Floodplains of tributary rivers, mainly the Sacramento and San Joaquin, merged with these tidal environments, producing supratidal levees within the Delta and seasonally converting many tidal wetlands to alluvial flood basins. It was primarily upon the levees that historic settlements, like prehistoric ones, occurred. For the most part these settlements were single family farm residences or farm labor camps.

Under pressure from the missions with their associated military garrisons, tribal domains within the Delta apparently broke down rapidly. Cook (1955:56) states that "the delta area...was entered relatively early by the Spaniards and by the year 1820 had been almost completely swept of its native population." During the Mexican Period and subsequent breakdown of the missions the Delta became a refuge for Christianized Indians. This period was short-lived since settlement by Anglo-Hispanics soon began.

In the hope of creating stability in the interior, and to build a buffer zone for the coastal areas, California's governors awarded land grants in the Delta region. Within the study area, Paso del Pescadero which faced upon Old River was granted in 1843. It was owned, but not occupied, by Antonio M. Pico. The grant was patented by the United States on March 10, 1865. Pico

and one of the pioneer reclaimers in the Delta, Henry M. Naglee, were the claimants of the 35,546 acre tract (Thompson 1957).

Further elimination of native people came a few short years after the American conquest of California in 1846, largely as a result of the 1849 gold rush and its aftermath. Argonauts passing through the area on their way to the mines pushed aside any natives in their path. After failing at mining many of the argonauts turned to farming, disrupting the remaining Yokut subsistence resources and practices.

The magnitude of the historic changes cannot be underestimated and today only a very small percentage of the Delta retains relatively natural conditions (West 1977). None of the lands in the study area are unchanged; all have been modified to a greater or lesser degree by agricultural or dredging activities. As summarized by Atwater and Belknap (ibid), human activities since 1850 have greatly altered the Delta. Artificial levees, erected for flood control and agricultural reclamation, now surmount all of the major natural levees and surround 98 percent of the historic wetland. Areas of diked wetland now lie as much as 18 feet below sea level because of decomposition and deflation of cultivated peat (Weir 1950). Locally, this land, such as along the North Victoria Canal, is mantled by sand and silt from floods that breached the levees. Waterways have been shoaled by sediment from upstream hydraulic gold mines, deepened by dredging of construction material for levees, and interconnected by dredged-cut channels. In the study areas, dredged channels include the Grant Line Canal, West Canal, Victoria-North Canal, Woodward-North Victoria Canal, as well as numerous smaller cuts along Old River.

Thompson and Dutra (1983) and Thompson (1957) have discussed the dredging and reclamation history of the Delta. During the decade from 1860 to 1870, 15,000 acres of the Delta had been reclaimed; by 1930 total reclaimed area exceeded 441,000 acres. In the study area, the Tide Land Reclamation Company partially reclaimed Union Island before selling it to T.H. Williams in 1875. The first levee enclosure of any size was made in 1872, but this was washed out in the spring of 1876. By the fall and winter of 1876, 45 miles of levee were under construction. Victoria and Woodward Islands were created by dividing them from Union Island. The canals outlining the present Victoria Island were cut before 1885. Work began on the North Victoria/Woodward Canal in mid-September 1876 by a labor force that included up to 3,000 Chinese workers. Seven to eight miles of twin retaining walls were in-filled with dredged pumped sand to create the levees for the canal. The Von Schmidt rotating siphon pump dredge worked at Union and Victoria Island until 1882. Portions of swamp varying in size from 10 to 100 acres were left on the natural channel side of Union Island to avoid the cost and flood risks associated with building levees around meander bends. Subsequently these swamps have been removed or have been cut into islands with further channel modifications.

Reclamation of the Pescadero properties began in 1877 with the construction of a 750-foot dam across the head of Paradise Cut, the second distributary into which the San Joaquin River divides as it enters the Delta. Some 400 workers constructed the seven-foot-high earth barrier and prepared 2,000 acres for cultivation near Old River. At about the same time other crews completed the levees on the Pescadero part of Union Island (Thompson *ibid*).

The Byron and Clifton Court tracts were reclaimed prior to 1900. Initial reclamation of the Byron Tract in 1870-74 began with a 4.5-foot levee along Old River. Flooding in 1875 was followed by the enlargement of the levee to the south during 1877 to 1879, but the land was not fully reclaimed until about 1900. Clifton Court Tract was reclaimed in 1898 or 1899 (Thompson *ibid*). Both tracts flooded on March 22, 1907 and the dredge Albion was used to restore the Byron Tract's levee system in 1908. In 1909, the dredge Big Dipper worked for some months raising 17 miles of embankment at the Byron Tract. The purpose of all this work, of course, was to reclaim the rich agricultural lands (Cosby 1941). All the levees have been modified and enlarged over the last 80 years and none of the original levees remain intact. Clifton Court Tract was flooded for the forebay of the State Water Project Delta pumping plant in the 1960's.

Generally, land tenure change has consisted of large units of property broken-up into small units with tenant or crop-sharing farmers which subsequently were consolidated into larger units. Today, like in the past, much of the land in the study area is corporate held by non-residents, though a number of large family farms still remain. Leasing of farm land is still common. A result of property consolidation has been the destruction of tenant farmsteads and labor camps or, less often, these structures have been moved. Abandoned structures commonly were burnt and the land used for crops.

Mechanized farming has replaced the need to have large numbers of laborers except for specialized short-term activities. Also, the ethnicity of the work force has changed through time. Prior to the exclusion acts of the

1880s, the Chinese were the primary laborers. They were replaced by other immigrant groups such as the Italians, Portuguese, East Indians, Japanese, and Mexicans. Up until World War II a large percentage of Delta farm laborers and share croppers were Japanese. Today Mexicans and Mexican-Americans are the primary laborers.

Most of the crops grown in the study area are high value, such as asparagus, and a large percentage are shipped fresh throughout the United States. Trucks, trains, and planes have replaced barges and boats for the shipment of agricultural goods. Landings for the most part have been abandoned. Prior to the 1950s canneries adjacent to the study area were the major food processing mode.

Potential historical structures in the study area are all related to agricultural activities. These include farmsteads, labor camps, landings for the shipment of agricultural produce, canneries, pumping stations, siphons, canals, drains, unpaved roads, bridges, and ferry crossings. Typically farmsteads consist of one or more houses, a barn, corral, and work/equipment sheds. Farmsteads were almost always placed on the highest elevation on the property, quite often, as noted above, on or adjacent to levees. Labor camps generally consisted of one or more wooden bunkhouse or boarding house, dinning hall, cookhouse, washroom, and privies. Associated were barns, corrals, workshops, equipment sheds, and offices for the management. Some of the structures were elevated on piers. Most labor camps were located adjacent to levees. Landings for the most part were not elaborate and consisted of a few pilings or a dolphin, and in a few instances a loading dock sometimes

associated with a large packing shed on or adjacent to the levee. Pump stations and siphons were and are still used lift tail water and seepage over the levees and to maintain ground water levels. Most irrigation is done by gravity feed. With few exceptions canals and drains are unlined ditches. At least three ferry crossings were present in the study area. The ferry crossings to Clifton Court and north of Bethney are noted on the 1913 USGS map. Roads are typically on levees or placed on raised berms. Other activities represented, but of no historical significance, are recreation properties-waterfowl hunting lodges, bait shops, retirement homes, marinas, and resorts. Today no hunting lodges remain in the study area. Some "lodges" served as bawdy houses.

The only recorded historic site in the study area is Mohr's Landing located north of Bethany. First known through the 1850's as Burns' Landing (for Maurice Byrnes), it was renamed Mohr's Landing in honor of German emigrant and pioneer John Mohr (Hillman and Covello 1985). Mohr established a settlement on the west bank of Old River. The Pacific Coal Mining Company in Corral Hollow shipped coal to a barge-loading facility here in the 1860's. The floods of 1862 and 1864 destroyed the riverside settlement of Mohr. Moving to higher ground to the south, Mohr constructed a hotel and initiated the town of Bethany. Railroad service began in 1878 and by 1880 there was a railroad station, general merchandise, liquor store, hotel, blacksmith and wagon maker shops. During the early 1880's a second blacksmith shop, butcher shop, and shoemaker shop were established. A post office was contained in James O. Hutchins general merchandise store. The town served as a shipping point for hay, grain, sugar beets and, in later years asparagus. Bypassed by other transportation routes, however by 1929 only one business, a general

merchandise, remained listed for the town. In 1940 the post office closed. The 1943 Corps of Engineers 15 min. topographic map gives the name "White House Landing" on the north side of Old River across from Mohr's landing and has symbols for several structures in the Bethany area. Today none of the town's business or railroad buildings remain.

Victoria Island is one of the potential dredge spoil areas. The island is typical of Delta region being completely devoted to agriculture. Structures are limited a few farm laborer's homes and farming related storage facilities and offices, none of which have any historic value. Irrigation is by gravity through unlined canals. The entire area is part of Victoria Island Farms, which has been owned by the Nichols family since 1963. Victoria Island Farms is one of the largest asparagus producers in the state, with 1,800 acres and annual production of more than 6 million pounds (Oltman 1994).

Geographic Reconstruction

As noted the geography of the Sacramento-San Joaquin Delta is far different today than it was prior to about 1850, before extensive dredging and building of levees for reclamation of farm land. In some cases these activities have placed archeological sites far out of their proper environmental context. Based upon the reconstruction of watercourses and surface geology of the Delta prior to reclamation (Atwater 1982), it is possible to view more clearly late prehistoric archeological sites in their original environment (Map 6).

Eleven of the fifteen previously identified archeological sites in the study area (West and Scott 1990) are situated on supratidal alluvial-

floodplain deposits of the Holocene. Six of the eleven are located adjacent to present natural water channels, one is midway between a present waterway and a few old (reconstructed) channels no longer in existence, and four are adjacent to extinct water channels. These later extinct channels are due to historic reclamation activities. The four remaining sites are located on creek alluvial deposits of the Holocene or upper Pleistocene. Two of these are found on the margins of reconstructed tidal wetlands (existing before 1850), and the remaining site is located near a present natural water channel. The data are compatible to those observed in the Cosumnes River area (Pierce 1988).

Since the development of the Delta has been partly dependent upon post-Pleistocene sea level rise,³ aggradation of fine grained sediments, and the bio-accumulation of organics (Atwater 1980, Shlemon and Begg 1975), there is some possibility that early Holocene sites may be buried in the Delta. All the of the sites noted in this study are at elevations above or very close to modern day mean sea level. All sites are located on mineral soils. Most of the sites are adjacent to modern or ancient channels. Sites below mean sea level are in areas that have been leveled and are surrounded by soils with a high organic content. No sites have been previously recorded in peat (>50% organics) areas or below contour elevations of -5 feet below mean sea level (based on USGS 7.5' quad. map elevations). However, it is important to note that all the recorded sites appear to be of the "late period." These late sites were easily recognized and therefore they were noted by early researchers. Manifestations of earlier cultures after thousands of years of

³ At the end of the last glacial sea level was more than 180 feet lower than today (Atwater, Hedel and Helly 1977). While there is some evidence for tectonic subsidence, the amount is insignificant when compared global sea level change during the late Pleistocene-early Holocene.

weathering, burial, and erosion may be far more subtle and not so readily evident as late period sites.

The base of present-day Delta organic deposits in the Clifton Court area are only about 5000 years old (West 1977) and for the rest of study area probably do not extend back more than 6000 years ago. By 6-8000 yrs B.P. sea level rise had slowed considerably and allowed for the accumulation of Delta organics.⁴ The contact of pre-Holocene deposits with Holocene deposits is not defined but must consist of alluvial fan deposits and late Pleistocene-age dunes. Atwater (1982) has dated the dunes on Bradford Island at 10-14,000 years ago; elsewhere in the Delta he has dated dune deposits to a minimum of 7000 and an approximate maximum of 40,000 yrs B.P. Also much of the area must have been subjected to erosion during late glacial times because of changes in base level. Channels would have been incised during periods of lower sea level and any associated deposits should be coarser-grained than the Holocene-age Delta mineral deposits, which consist of silts and clays.

Reconstructed watercourses and other features of surface geology (Atwater 1982) were used as a basis for generating predictive models of prehistoric settlement patterns (Map 6). The reconstruction of environmental features suggests a relationship between specific natural features (e.g. streams, major water channels, margins of tidal wetlands), sediment type, and elevation and the presence of archeological sites. Further mapping of extinct water courses can help to explain the location of other sites, and can be used to define areas of sensitivity for archeological sites which may now be buried. Finally, dating natural sediments on which sites are found may be useful in

⁴ Organic deposits (peat) in the Delta are discontinuous and vary greatly in thickness, although deposits in the inner-westward islands and tracts are thicker than on the outer margins of the Delta.

predicting the location of the same period sites on other sedimentary deposits of the same age.

Results

Cultural Resources- Historic Properties

The following discusses the findings as a result of the proposed actions.

A. No action. No change from current conditions, archeological data will continue to be lost by leveling and other modifications.

B. Direct water level and circulation improvements.

1. New intake to Clifton Court Forebay - The area has been completely modified by the construction of Clifton Court Forebay. No historic properties are present.

2. Spoil Areas - Two potential spoil areas were examined- an existing spoil area at Clifton Court and a general location of Victoria Island. No historic properties are present in the existing spoil area at Clifton Court or on the proposed spoil area of Victoria Island. The former is covered by dense riparian vegetation and introduced plants, except for a few locations along dirt tracts and drainage ditches the ground surface was obscured. Of the latter, the area is under intense agriculture and has been completely altered to facilitate such activities. At the time of the reconnaissance no specific spoil areas had been determined for Victoria Island and intensive survey was restricted to areas of mineral sediments and sites noted on historic records and maps (ca. 5 acres). A general reconnaissance was made of the remaining area. Structures noted on earlier USGS (1914) and other maps (1913) have been removed with little evidence of their former presence remaining (assumed to be the isolated brick, pieces of roofing material and fragments of milled lumber). The only other features are unlined irrigation ditches and drains,

none of which are historically significant since they do not meet any the the criteria to be eligible.

3. Fish Protection Flow Control Structures (Barriers

a. Old River(Roberts Island to Stewart Tract)- Proposed action will replace a temporary structure with a permanent one. Access will be along existing public and private roads. The entire area has been modified by levee construction, the temporary barriers, and agricultural activities (Alfalfa fields). No historic properties are present.

b. Old River east of Delta Mendota Canal - This area was surveyed in 1991 (West 1991) and no historic remains were noted. A temporary barrier has been installed.

c. Grant Line Canal - This proposed barrier will cross from Union Island to Fabian Tract. Grant Line Canal/Fabian and Bell Canal were cut in the late 1800's. Dense vegetation covers the banks of Fabian and Bell Canal including the long lineal island separating the two canals. A summer home is present on the western end of the island. Union Island and the Fabian Tract are under intensive agriculture (corn and tomatoes in 1994). Rip-rap is present on all the lower levee banks. The entire area has been modified and no historic properties were noted in the APE.

d. Middle River - This temporary barrier will be replaced with a permanent barrier. The barrier is accessible via Klein Road, a public road, on the south bank and from a private road off Highway 4 on the north bank. We did not have access via the private road to the north bank. The area on the south bank and what could be observed on the north bank from the south was highly disturbed by the temporary barrier, levee construction, rip-rap, recreational fisherman, and intense agricultural activities. No historic

properties were recorded. Replacement of the existing structure should have no effect on historic properties.

4. Channel Dredging - Dredging along a reach of the Old River just north of Clifton Court Forebay. No records of any historic structures (other than landings), ship wrecks, or other potential historic resources were noted for this reach of the river. No historic remains were noted during an on the water inspection by G.J. West in October 20, 1988.

5. Borrow sites - Rock borrow is from a commercial quarry. No other borrow sites are proposed.

Traditional Cultural Properties

To date no response has been received from the Native American Heritage Commission regarding the presence of sacred sites in the study area. A search of the primary literature on the area did not reveal any traditional cultural properties or sacred sites. The area was de-populated in the early historic period. No known descendants from the local ethnographic populations for the study area have been identified. Only the detailed and critical analysis of historic documents has been productive in the reconstruction of the ethnographic populations. These documents too are limited and problematical.

Conclusions and Recommendations

The results of the previous Class I and Class II archeological surveys indicate the presence of several archeological sites (Map 8) within the general area of the South Delta Water Management Program. These results are based on the records (cited references and records search; Map 7) and limited

surveys of the South Delta Study Area. The Class III archeological survey consisted of an analysis of the prehistoric, historic and geographic contexts for prediction and evaluation, reconnaissance level surveys, and intensive systematic on-the-ground survey (a series of parallel transects 5-10 meters apart of the APE where possible and justifiable) performed by the USBR archeologists in preparation of this report. Survey conditions ranged from excellent, recently plowed fields, to near impossible because of dense riparian vegetation or crops and flooded areas. Areas of made-land (rip-rap, levee fill, dredge spoil, and piles of recent trash) were not examined for obvious reasons.

In considering alternatives concerning direct water level and circulation improvements, no historic properties have been identified which could be impacted by barrier structure construction or operation. Access is along existing public or private roads. No historic properties have been identified which could be impacted by dredging or spoil operations and no historic properties have been identified which could be impacted by enlarging Clifton Court Forebay intake. In conclusion, the proposed project will not effect historic properties.

In the unlikely event that cultural remains are encountered during construction, all work in the area of the find should be halted until an evaluation by a professional archeologist can be completed. If human remains are encountered on non-Federal lands the county corner should be contacted. If the remains are those of Native Americans the county corner is required to contact the California Native American Heritage Commission to find the most

likely descendant(s). If project changes are made, such as new barrier locations, borrow sites, access roads, additional survey may be required.

Appendix 1Notes on Previously Recorded Sites, by Quadrangle

(Archeological sites noted on Map 6)

Clifton Court Forebay 7.5'

CCo-130 Byron tract. No data available other than a note in University of California Museum of Anthropology (UCMA) correspondence. Site was not found during this survey despite intense reconnaissance. Site may be under levee or has been destroyed. The area currently (May, 1990) is a asparagus field.

CCo-143 Byron tract. Site is located on the current sea level contour. A pestle was found by Heizer at this location (UCMA 727). No other data by Heizer is available. Site re-examined and updated site record prepared. The site has been leveled for agriculture. The surface is marked by a sparse scatter of broken rocks. The soil of the site has a "puffy" texture (salt damage?) and the growth of barley was stunted to absent from portions of the site's surface. Two obsidian flakes and a spire-lopped Olivella shell bead were collected.

CCo-144 Byron tract. Site recorded by Heizer in 1948, "a few yards from CCo-143". (UCMA 727) This site was not found. The area of the mapped site was covered with barley when revisited.

SJo-136 Site not relocated during San Luis Drain survey (USBR 1983), but a chert uniface and a bone fragment were found near recorded location. Imprecise location for this site. Area has been leveled and is now (May, 1990) in row crops.

SJo-137 Old River. Mound site of unknown size. Originally described in 1898, by Barr, but may have been leveled since then. No mound was noted on

1952 quad map. Site was not found during a brief visit in May 1990. Area has been leveled and is now an asparagus field. Near "White House Landing."

Union Island 7.5'

SJo-6 Old River near Tom Paine Slough. A burial site 150' in diameter located in an orchard and farmyard 100 m south of Tom Paine Slough. A large dairy is now (May 1990) located on this site.

SJo-7 Near Sugar Cut, south of Tom Paine Slough. Habitation site (mound) with burials. Area has been leveled and farmed prior to 1939. Sugar Road may cut through site. No evidence of site was found on either side of Sugar Road during a brief reconnaissance in May, 1990. The ground had been recently plowed.

SJo-8 Near Sugar Cut, south of Tom Paine Slough. Habitation site with burials. Area has been leveled and farmed prior to 1939. Today the area is used for drying waste from the sugar plant. Portions of the area have been paved. No evidence of this site was found.

SJo-9 Near Sugar Cut, south of Tom Paine Slough. Habitation site with burials. Area has been leveled and farmed prior to 1939. Today the area is used for drying waste from the sugar plant. Portions of the area have been paved. No evidence of this site was found.

SJo-133 Middle River, Union Island. Mound site, size unknown. Now under levee near SJo-134 and SJo-135. Originally located in 1898. Site was not relocated in May, 1990. The area is covered with dense groves of giant reed.

SJo-134 Middle River, Union Island. Mound site, size unknown. Now under levee near SJo-133 and SJo-135. Originally located in 1898. Site was not

relocated in May, 1990. Raised area on landward side of levee may be part of the original mound. This area is now covered by a corral.

SJo-135 Middle River, Union Island. Mound site, size unknown. Now under levee near SJo-133 and SJo-134. Originally located in 1898. Site not relocated in May, 1990. The area is covered with dense groves of giant reed.

SJo-138 Old River. No recent data available, a mound originally located in 1898. Area has been leveled and now is a field.

SJo-139 Old River. Known as Bagley or Birk or Burke site. No other data available. Area has been leveled and is now an orchard.

Mohr's Landing, Old River north of Bethany. Barge crossing dating to the 1850's. Carried coal which was transported from mines south of Tracy. No known remains.

P/H Undine. Prehistoric site noted on early map for region. The area is a mound with a residence. Private property, access denied.

Woodward Island 7.5'

CCo-145 Indian Slough by Discovery Bay, Byron tract. Recorded by Heizer in 1948 (UCMA accession 727). No other data available. Site is outside of study area.

Appendix 2Paleontologic Resources

Spencer (1989) reviewed the records for vertebrate paleontological sites in the Sacramento-San Joaquin Delta and surrounding region and prepared a sensitivity map for the probability of encountering fossils. In the Delta proper Spencer noted three localities- (1) an Holocene baleen whale skeleton from the center of Mandeville Island, (2) fossil horse bones recovered from a water well in Lincoln Village, Stockton, and (3) a large unidentified mammal from Tule Canal near Clarksburg (elevation 20' above mean sea level). A much larger number of fossil localities are present on the margins of the Delta. All locations, except for two, are above sea level. Pleistocene Rancholabrean remains (horse, camel, and sloth) were recovered from a gravel pit 2 miles east of Antioch. The depth of the finds are unknown but it is below sea level since the gravel pit was excavated to 125 feet below the land surface. Other vertebrate fossils have been found during minus tides near the Big Break-Jersey Island channel of the San Joaquin River.⁵

Spencer (ibid) concluded that there was a low probability of finding vertebrate fossils in the Delta. Her sensitivity map placed the boundary of higher sensitivity to the west of Old River, including Byron, Veale Tracts, Clifton Court and lands south of Old River. Depths less than 10-15' also were considered less sensitive, yet the Holocene whale on Mandeville Island was found less than 2 feet below the present land surface (19.2' below mean sea level).

⁵ Spencer lists this locality as outside of the delta, but it is clearly within the delta and subject to tidal changes. Age of the fauna is not provided and additional information on the locality was not found at UCMP.

An additional records check was made at the Museum of Paleontology, University of California, Berkeley (UCMP), on July 5, 1994. No new vertebrate fossils localities have been recorded for the region since Spencer's 1989 study. Not noted in the previous study and not recorded at UCMP was a newspaper account of a mammoth find while excavations were being made for a well near Tracy in the late 1800's (USBR files). However, it is clear that the likelihood of finding vertebrate fossils in the South Delta Study area is low.

Sediments of the Delta also contain Holocene age macro- and microscopic fossils -seeds, pollen, and diatoms- that can provide significant data about past environments (West 1977). None of the proposed construction sites have undisturbed sediments useful for accurate stratigraphic studies required for analysis of these types of fossils.

In conclusion the probability of disturbing paleontologic sites is low. No paleontologic remains were noted in the APE of the project area. Should fossils be encountered during excavations, a professional paleontologist should be contacted through the University of California Museum of Paleontology, Berkeley to evaluate the find and provide recommendations for recovery and analysis.

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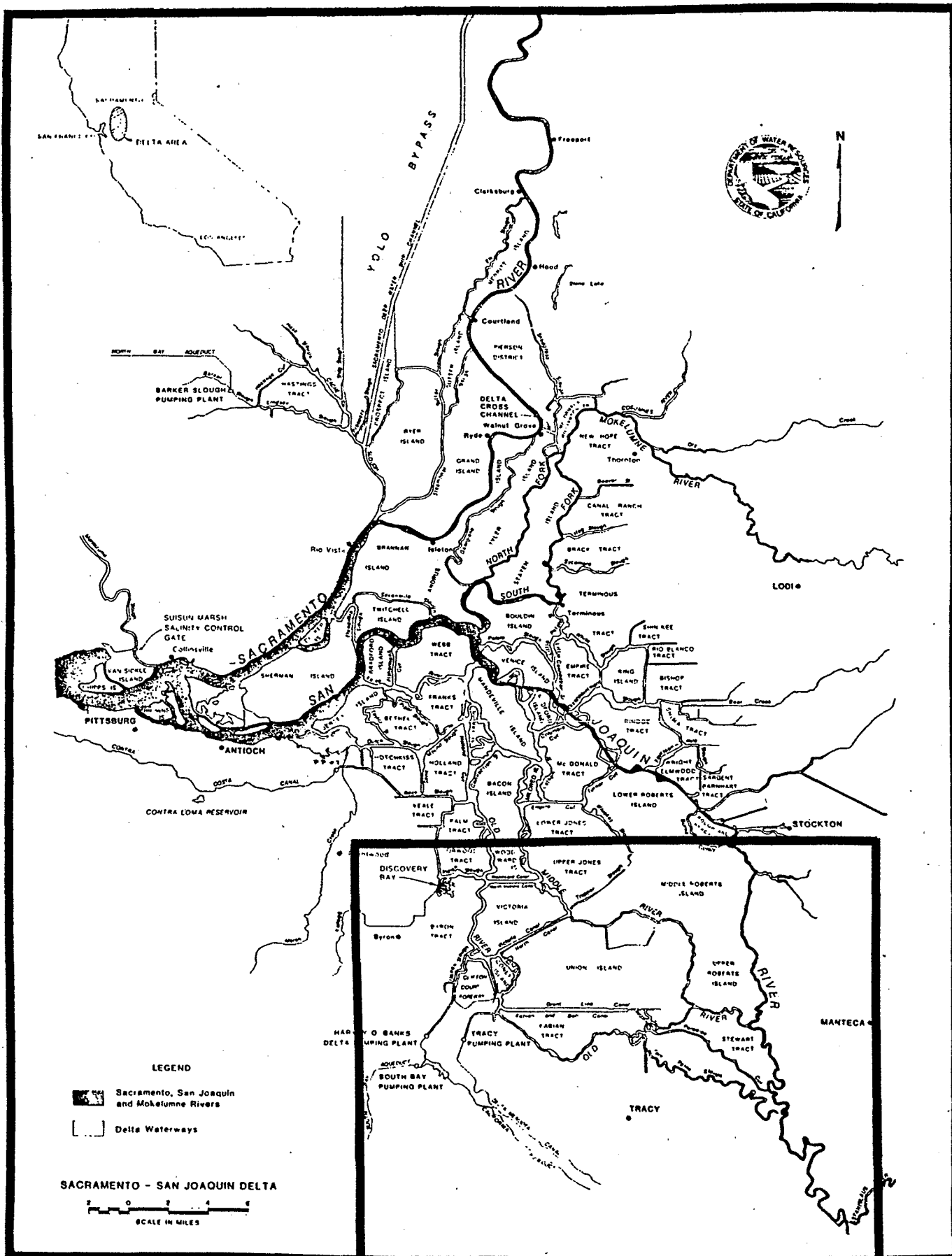
West, G.J. and B. Scott

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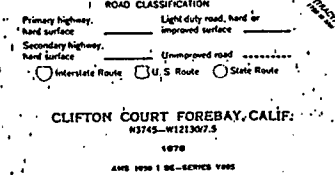
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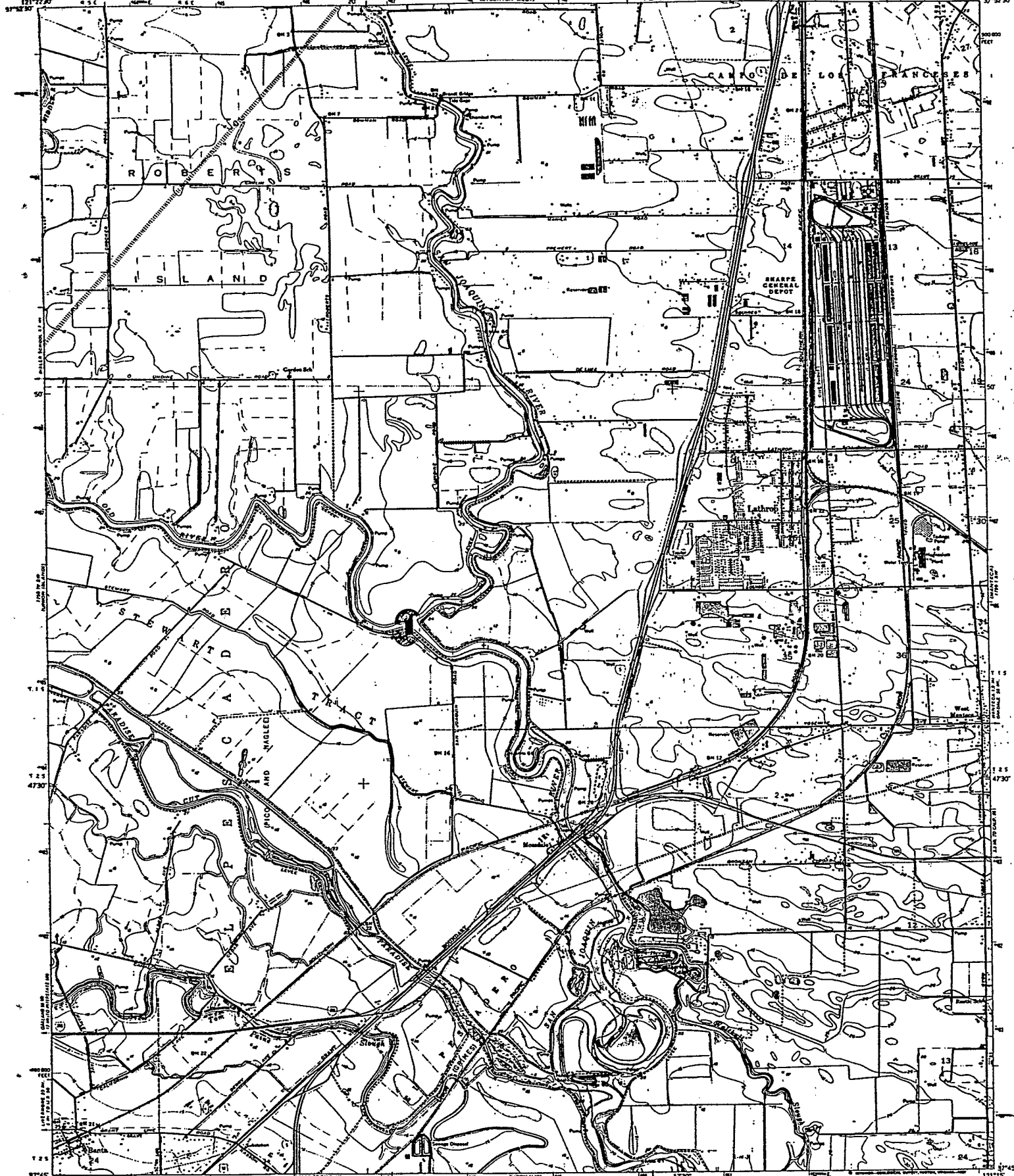
MAP 1



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C-073689





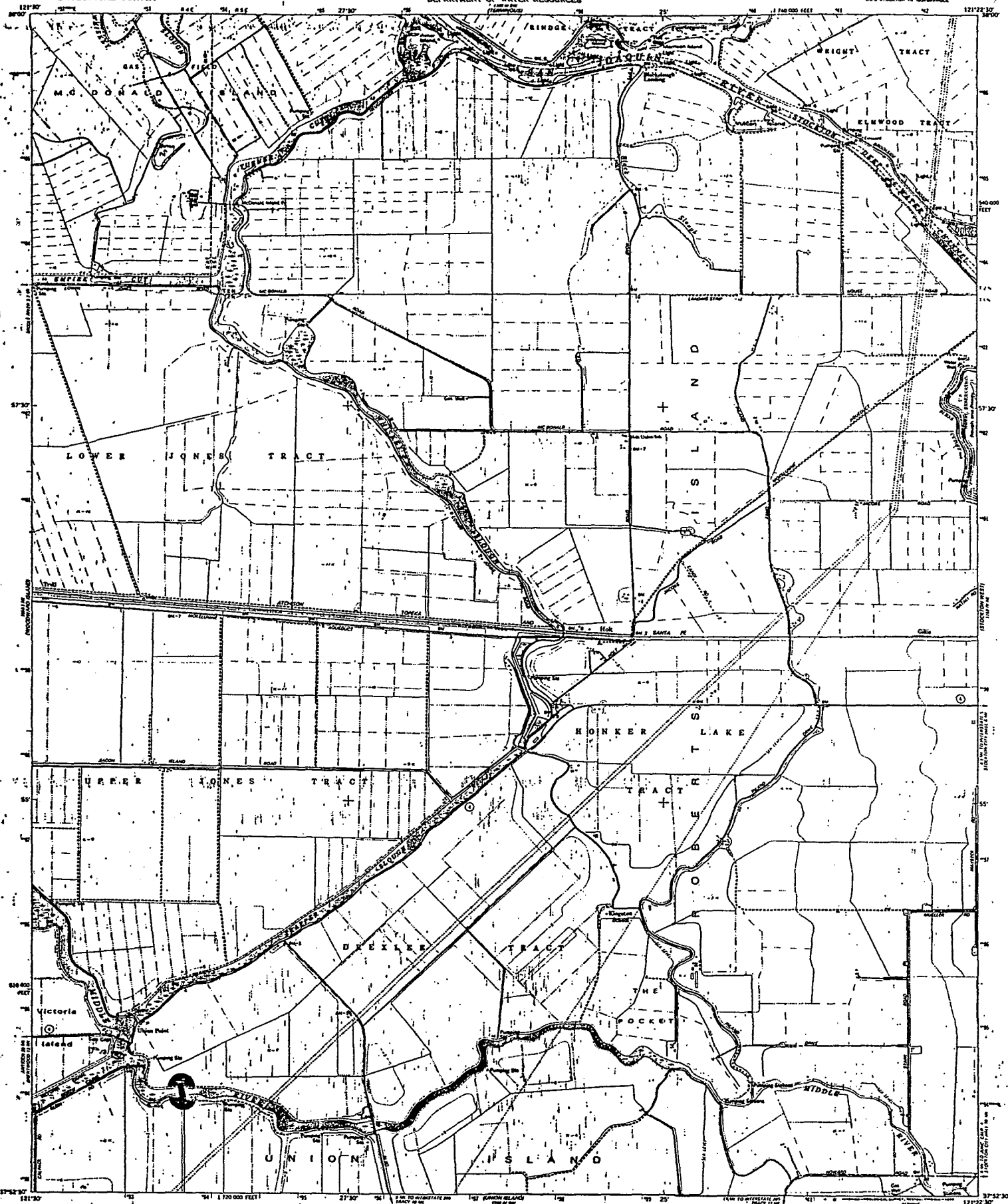
Mapred, edited, and published by the Geological Survey
Control by USGS and NOAA
Aerial photographs taken 1949
Topography from planimetric surveys by USGS 1952
Polyconic projection, 1927 North American datum
11,000-foot grid based on California coordinate system, zone 3
1000-meter Universal Transverse Mercator grid (UTM), zone 18, shown in blue
To place on the projected North American Datum 1983, move the projection lines 13 meters north and 92 meters west as shown by dashed corner ticks
There may be private inclusions within the boundaries of the Federal or State reservations shown on this map
Dashed land lines indicate approximate locations
Dotted land lines were established by private survey
Position of T&E numbers in unshaded areas are approximate
Land Grant boundaries which follow the border

SCALE 1:24,000
CONTOUR INTERVAL 5 FEET
CONTOURS INCOMPLETE ALONG EXHIBITS AND DITCHES
NATIONAL GEODETIC VERTICAL DATUM OF 1929

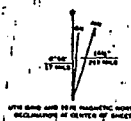
ROAD CLASSIFICATION
Heavy-duty Light-duty
Medium-duty Unimproved dirt
U.S. Route State Route
Interstate Route

LATHROP, CALIF.
see EXHIBITION OF BUREAU OF LAND MANAGEMENT
37121-63-77-024
1962
PHOTOGRAPHED 1967
DATA 1750 BY 16-48888 1969

THIS MAP COMPLETES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER OF EXHIBITS, TOPOGRAPHIC MAPS, AND SYMBOLS IS AVAILABLE ON REQUEST



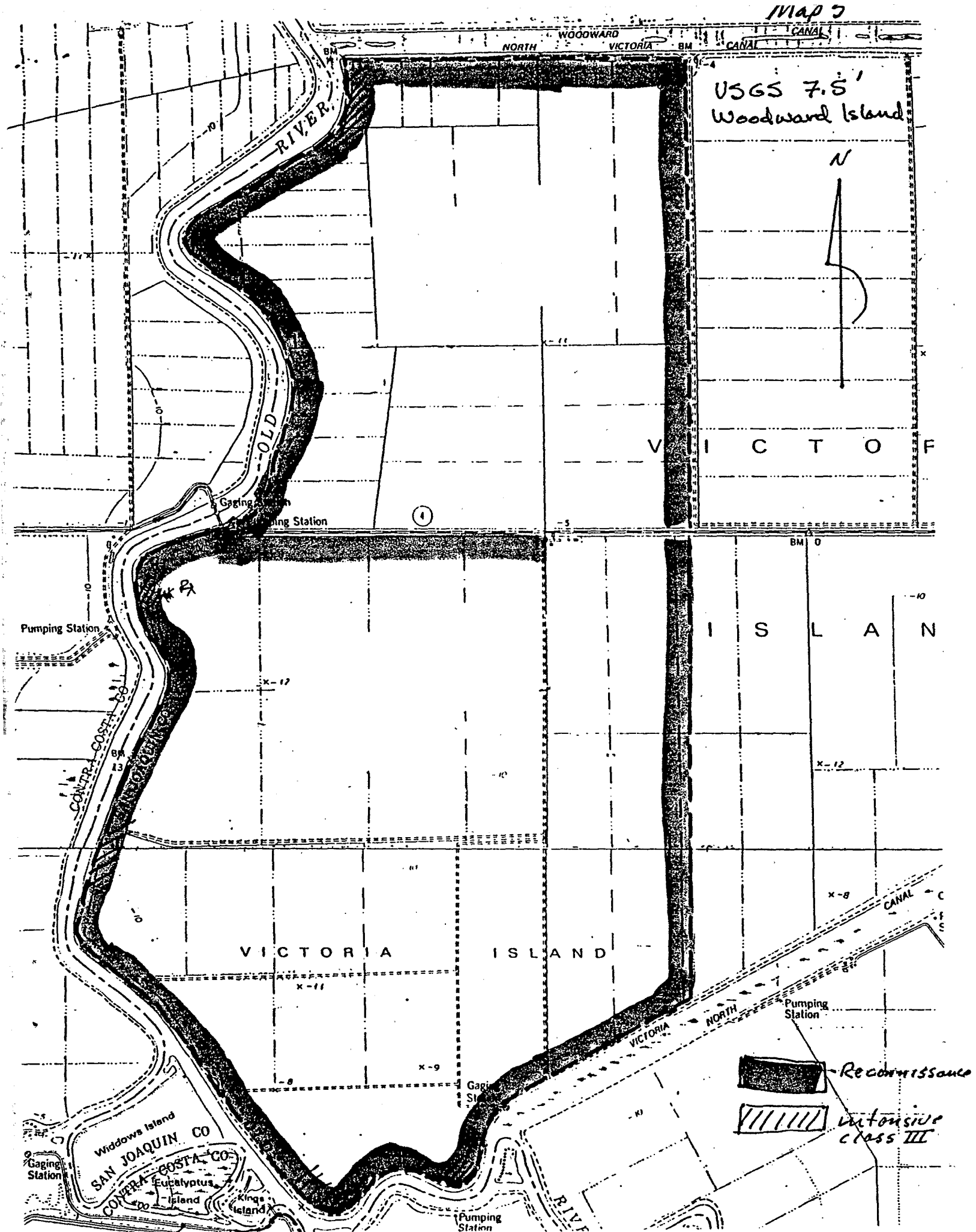
Maped, edited, and published by the Geological Survey
Control by USGS and NOS/NOAA
Topography by photogrammetric methods from aerial
photographs taken 1974 and photostatic surveys 1976
Supervisory map dated 1992. Map edited 1978
Selected hydrographic data compiled from NOS/NOAA Chart 18661 (1976)
This information is not intended for navigational purposes
Projections and 10,000-foot grid ticks; California coordinate
system, zone 10 (NAD83) confirmed control
1000-meter Universal Transverse Mercator grid ticks,
zone 10, shown in blue. 1927 North American datum
This map has not been adjusted
Vertical control based on latest available adjustment



SCALE 1:24,000
CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET—BATHY IN FEET—LOW WATER
BOUNDARY SHOWS APPROXIMATE LINE OF SHORE WITH BATHY
THE SHORE LINE OF THIS MAP IS APPROXIMATELY 5 FEET
THIS MAP COMPLETES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



ROAD CLASSIFICATION
Primary highway, hard surface Light duty road, hard or improved surface
Secondary highway, hard surface Unimproved road
Interstate Route U.S. Route State Route
HOLT, CALIF.
Map Station 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102, 108, 114, 120, 126, 132, 138, 144, 150, 156, 162, 168, 174, 180, 186, 192, 198, 204, 210, 216, 222, 228, 234, 240, 246, 252, 258, 264, 270, 276, 282, 288, 294, 300, 306, 312, 318, 324, 330, 336, 342, 348, 354, 360, 366, 372, 378, 384, 390, 396, 402, 408, 414, 420, 426, 432, 438, 444, 450, 456, 462, 468, 474, 480, 486, 492, 498, 504, 510, 516, 522, 528, 534, 540, 546, 552, 558, 564, 570, 576, 582, 588, 594, 600, 606, 612, 618, 624, 630, 636, 642, 648, 654, 660, 666, 672, 678, 684, 690, 696, 702, 708, 714, 720, 726, 732, 738, 744, 750, 756, 762, 768, 774, 780, 786, 792, 798, 804, 810, 816, 822, 828, 834, 840, 846, 852, 858, 864, 870, 876, 882, 888, 894, 900, 906, 912, 918, 924, 930, 936, 942, 948, 954, 960, 966, 972, 978, 984, 990, 996, 1000
1978
Map 127-1 in 11" x 11" 10" x 10" 10" x 10"



C-073693

C-073693

Map 7. South Delta Study Area with archeological site locations.



C-073694

C-073694

California
Archaeological
Inventory



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE

MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO

SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Department of Anthropology
Sonoma State University
Rohnert Park, California 94928
(707) 664-2494

18 August 1989

File No: 89374

Fred Bachman
Department of Water Resources
P.O. Box 942836
Sacramento, California 94236-0001

re: South Delta Water Management Program, Contra Costa County, California.

Mr. Bachman:

There is a possibility of prehistoric and historic cultural resources and archival and field study is recommended.


Review of records and literature on file at this office indicates that the study area contains four recorded prehistoric archaeological sites listed with the California Archaeological Inventory. This office has no record of historic archaeological resources within the study area. The California Inventory of Historic Resources lists "Timber Landing Point" on Indian Slough off Old River (possibly within the study area). Other state and federal inventories (see attached) list no historic properties within the study area. Less than 1% of the study area has been archaeologically surveyed (Jackson 1976).

In this area of Contra Costa County, the majority of recorded prehistoric archaeological sites are along sloughs and/or associated with soils of the Piper Series. The study area contains these environmental features (Welch 1977) and four prehistoric archaeological sites (CA-CCO-130, -143, -144, and -145) have been identified. There is a possibility of additional prehistoric cultural resources in unsurveyed areas. In addition to the "Timber Landing Point" mentioned above, a recent cultural resources study of neighboring tracts and islands of the Delta system resulted in the identification of numerous historic properties, many of which were determined eligible for inclusion on the National Register of Historic Places (Maniery et al. 1989). There is therefore the possibility of similar such resources within the study area. Identified cultural resources should be recorded on forms DPR 422 (archaeological sites) and/or DPR 523 (historic resources) or similar forms.

The Office of Historic Preservation has determined that buildings and structures 45 years or older may be of historic value. If the project area contains such buildings or structures, they should be evaluated, prior to commencement of project activities. If cultural resources are encountered during the project, avoid altering the materials and their context until a cultural resource consultant has evaluated the situation. Project personnel should not collect cultural resources. Prehistoric resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits, often in old wells and privies.

Thank you for using our services. If you have any questions, please do not hesitate to contact us.

Sincerely,


Brian F. Terhorst
Researcher II

LITERATURE REVIEWED

In addition to archaeological maps and site records on file at the Northwest Information Center, California Archaeological Inventory, the following literature was reviewed:

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- 1976 Archaeological Reconnaissance, 4-CC-4, 44.3/48.3 ("Discovery Bay").
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Northwest Information Center File No: S-956

Maniery, Mary and Keith A. Syda, with contributions by Judith Cunningham

- 1989 Cultural Resources Investigation and Evaluation of Delta Wetlands
Water Storage Project, Contra Costa and San Joaquin Counties,
California. PAR & Associates, Sacramento. Northwest Information
Center File No: S-10660

National Park Service (compiler)

- 1989a National Register of Historic Places Index by Property Location:
Listed Properties (Computer Listing for 1966 through 23 February
1989). National Park Service, United States Department of the
Interior, Washington, D.C.
- 1989b National Register of Historic Places Index by Property Location:
Determined Eligible Properties (Computer Listing for 1966 through 23
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State of California Department of Parks and Recreation

- 1976 California Inventory of Historic Resources. State of California
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Parks and Recreation, Sacramento.

State of California Office of Historic Preservation

- 1986 Point of Historical Interest Log. State of California Office of
Historic Preservation, Sacramento, N.p.

Welch, Lawrence E.

- 1977 Soils Survey of Contra Costa County, California. United States
Department of Agriculture, Soil Conservation Service, in cooperation
with the University of California Agricultural Experiment Station.
N.p.



CENTRAL CALIFORNIA INFORMATION CENTER

(209) 667-3307/3127

Department of Anthropology
California State University
Turlock, California 95380

ALPINE
CALAVERAS
MARIPOSA
MERCED
SAN JOAQUIN
STANISLAUS
TUOLUMNE

8/9/89

Mr. Fred Bachman, Chief
South Delta Management Planning
Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

RE: File #1020L
South Delta Water
Management Project

Dear Mr. Bachman:

Upon receipt of the project maps we have completed a records search as per your request for the San Joaquin County portion of the above-referenced project area located on the Clifton Court Forebay and Woodward Island USGS 7.5-minute quadrangle maps. For the portions of the project within Contra Costa County and Alameda County, you will need to contact Dr. D. Fredrickson, Northwest Information Center, Department of Anthropology, Sonoma State University, Rohnert Park, CA, 94928. Additional portions of the water management project area are located on the Holt, Lathrop and Union Island 7.5-minute quadrangle maps.

According to our files there are seven cultural resources located within a one-mile radius of the proposed project areas; we have plotted these approximately on the map you transmitted, and have included portions of quadrangle maps with the exact or approximate site locations, as noted. These cultural resources are described as follows:

CA-SJO-0138: location approximate; artifacts reported here in 1898.
CA-SJO-0139: " "; no other documentation.
CA-SJO-218H: George Shima ("The Potato King") Camp #10
CA-SJO-219H: Shima Camp 10 ½
CA-SJO-220H: Shima Camp 11
CA-SJO-221H: Bridge Tender House
CA-SJO-222H: Shima Camp 12

There have been two cultural resource investigations within a one-mile radius of the project area, cited as follows (the location of these surveys has also been provided on the quad map portion):

Maniery, M.L. and K. A. Syda, 1989. Cultural Inventory and Evaluation of Delta Wetlands Water Storage Project, Contra Costa and San Joaquin Counties, CA. PAR & Associates, Jones and Stokes Associates, Sacramento.
CA-SJO-218H-222H.

Napton, L. K., 1986. Cultural Resource Investigation of the Woodward Island Bridge Site, San Joaquin County, CA. Cal-State U Stanislaus, Institute

L. Kyle Napton, Coordinator

E. A. Greathouse, Assistant

C - 0 7 3 6 9 7

C-073697

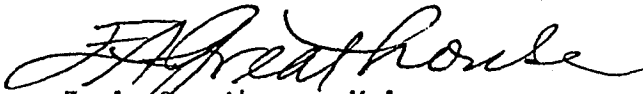
for Archaeological Research, Turlock, CA. CSUS/IAR 86-5.

As you can see from the results of the records search, the proposed project area has not been subject to previous project-specific cultural resource investigation. It is very possible that undiscovered archaeological and historical cultural resources are located within or in proximity to the proposed project area. Only comprehensive survey of the proposed project tract will reveal the presence or absence of unrecorded archaeological or historical cultural resources.

This communication is advisory only and does not constitute a negative declaration of impact upon archaeological or historical cultural resources. The law requires that if cultural resources are found during project-related activities, all work is to cease and the lead agency and a qualified archaeologist are to be contacted regarding evaluation of the find.

Thank you very much for contacting this office regarding cultural resource preservation in San Joaquin County. Since as a result of this records search we have revealed to you the location of archaeological and historical cultural resources, we please ask you to sign and return the attached Agreement of Confidentiality Form. Billing is also attached. Please contact this office if we can be of further service.

Sincerely,



E. A. Greathouse, M.A.

Attachments

OFFICE OF HISTORIC PRESERVATION

DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 942896


SACRAMENTO 94296-0001

(916) 653-6624

FAX: (916) 653-9824

September 14, 1994

Reply to: BUR900711A

BUREAU OF RECLAMATION OFFICIAL FILE RECORDED		
SEP 20 1994		
CODE	150	DATE

Frank J. Michny
Acting Regional Environmental Officer
Bureau of Reclamation
Mid-Pacific Regional Office
2800 Cottage Way
SACRAMENTO CA 95825-1898

Subject: South Delta Water Management Project, Contra Costa and
San Joaquin Counties

Dear Mr. Michny:

Pursuant to 36 CFR 800, regulations implementing Section 106 of the National Historic Preservation Act (NHPA), you have requested my review of the cultural resources documentation for the subject undertaking. Thank you for consulting me.

The Bureau of Reclamation (BUR) has entered into an agreement with the California Department of Water Resources (DWR) and the South Delta Water Agency (SDWA) to address water quality problems in the south delta. The BUR has conducted cultural resources inventory of approximately 150 acres. No historic properties were identified in the Area of Potential Effects (APE). Consequently, the BUR has requested that I concur with a no effect to historic properties determination for this undertaking. I do not object with the BUR's determination. Additionally, inventory methods appear to conform with the Secretary of Interior's Standards for Identification and I am satisfied that the requirements of 36 CFR 800.4(a and b) were fulfilled.

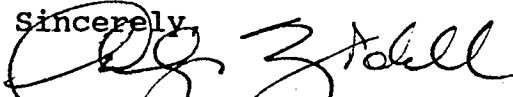
Accordingly, the BUR has satisfied the identification responsibilities pursuant to Section 106 of the National Historic Preservation Act. Be advised, however, that BUR may have additional responsibilities under 36 CFR 800 during any of the following circumstances: (1) If any person requests that the Advisory Council on Historic Preservation (ACHP) review your findings in accordance with 36 CFR 800.6(e); (2) if the undertaking changes in ways that could affect historic properties in an unanticipated manner (36 CFR 800.5(c)); (3) if previously undocumented properties are discovered during the implementation of a yet to be determined undertaking or if a known historic property will be affected in an unanticipated manner (36 CFR 800.11); (4) if a property that was to be avoided has been inadvertently or otherwise affected (36 CFR 800.4(c) and 800.5); (5) if any condition of the undertaking, such as a delay in

Mr. Michny
September 14, 1994
Page two

implementation or implementation in phases over time, may justify reconsideration of the current National Register status of properties within an undertaking's Area of Potential Effect (36 CFR 800.4(c)).

Thank you for considering historic properties during project planning. If you have questions concerning this review, please contact staff archaeologist Mr. Steven Grantham (916) 653-8920.

Sincerely,

A handwritten signature in dark ink, appearing to read "Cheryl E. Widell", written over the word "Sincerely,".

Ms. Cheryl E. Widell
State Historic Preservation Officer